

**CITY OF BOULDER
CITY COUNCIL AGENDA ITEM**

MEETING DATE: March 2, 2010

AGENDA TITLE: Three items related to tree protection:

1. Consideration of a motion to adopt **an ordinance** amending Titles 4 and 6, B.R.C. 1981 to **establish requirements for certified arborist licenses** and other requirements related to the planting, cutting, removing, or applying of pesticides to any trees; and
2. Consideration of a motion to adopt **an ordinance** amending Title 8, B.R.C. 1981 to **create an affirmative obligation of adjacent property owners to maintain street trees** and Title 9, B.R.C. 1981 to **establish tree protection requirements in the site review, subdivision, and landscaping standards**; and
3. A request for Council **direction on Phase 2 activities** for further development of tree protection standards and regulations.

PRESENTER/S:

Jane S. Brautigam, City Manager
Paul J. Fetherston, Deputy City Manager
David Driskell, Executive Director of Community Planning and Sustainability
Charles Ferro, Land Use Review Manager
Kathleen Alexander, City Forester
Elizabeth Lokocz, Landscape Architect

EXECUTIVE SUMMARY:

Tree protection in Boulder was identified as a topic of concern by City Council in 2007. Staff has completed Phase 1 of a two-phase approach evaluating and recommending regulatory changes to address gaps identified in current tree protection regulations. Staff requests approval of Phase 1 code changes presented in the attached ordinance (see **Attachment A**) and discussed in the City Council Memorandum for first reading dated February 2, 2010 (available online at <http://www.bouldercolorado.gov/files/Clerk/Agendas/2010/3G.pdf>). Proposed changes consist of code amendments that will strengthen tree protection in the city but have limited impact on the public and on staffing needs. Potential Phase 2 code changes, also discussed in the previous memo, considers more substantive tree protection measures requiring detailed impact analysis.

Proposed Phase 1 changes include:

1. **Arborist Certification:** Create a contractor license type for arborist certification and specify when a Certified Arborist is required (chapters 4-28 and 6-6 B.R.C.);
2. **Diseased Trees:** Reinforce and increase the inspection and enforcement processes already in place with particular attention to diseased trees on private property (chapter 6-6 B.R.C.);
3. **Mandatory Tree Inventory for Discretionary Reviews:** Require tree inventories for all Discretionary Reviews at the time of initial submittal (chapters 9-2 and 9-9 B.R.C.);
4. **Trees Crossing Property Lines (Trees in Adjacent Setbacks):** Require all Site Review and Building Permit applications to submit landscape plans that show all trees six inches or more in caliper adjacent to development sites (chapters 9-2 and 9-9 B.R.C.);
5. **Landscape Guarantee:** Remove the five year limit on landscape guarantees and require ongoing maintenance and replacement in perpetuity of the originally approved landscape plan (chapters 8-2 and 9-9 B.R.C.).

Phase 2 options for Council consideration include:

- Expansion of the city's definition of "historic" to include trees (Landmark Tree Designation),
- Permits for the removal of some trees,
- Mitigation standards for the removal of private trees for projects that undergo Site Review.

Based on Council direction, additional research and public comment regarding Phase 2 will be undertaken during 2010 and a Phase 2 ordinance drafted for consideration by Planning Board. City Council consideration for adoption would likely occur during the first quarter of 2011.

STAFF RECOMMENDATION:

Staff recommends adoption of the ordinances as included in **Attachment A**.

SUGGESTED MOTION LANGUAGE:

Staff requests City Council consideration of this matter and action in the form of the following motion:

1. **Motion to adopt Ordinance No. 7712 amending Titles 4 and 6, B.R.C. 1981 to establish requirements for certified arborist licenses and other requirements related to the planting, cutting, removing, or applying of pesticides to any trees; and**
2. **Motion to adopt Ordinance No. 7713 amending Title 8, B.R.C. 1981 to create an affirmative obligation of adjacent property owners to maintain street trees and Title 9, B.R.C. 1981 to establish tree protection requirements in the site review, subdivision, and landscaping standards.**

Additionally, staff requests Council consideration and direction regarding potential Phase 2 activities related to the further development of tree protection standards and direction to staff for further work.

ANALYSIS:

At the February 2, 2010 First Reading, Council members asked for the following additional information to aid in their decision on proposed Phase 1 code changes and discussion of potential Phase 2 code changes.

Question 1: Can staff further explain the duty to maintain trees on adjacent property? How would it be enforced? How it would work? How will one property owner face enforcement when an adjacent property owner doesn't take care of the trees he's supposed to?

Staff response: Current regulations require street tree maintenance for a period of five years if the tree is planted as part of a by-right project and in perpetuity if part of a discretionary review with a Development Agreement. This inconsistency is often used as an argument by developers to maintain street trees for only five years. The cost of water and mulch or any other groundcover maintenance is the responsibility of the property owner. The City will continue rotational pruning, tree safety inspections, tree removal due to natural decline after a tree passes maturity and presents a potential hazard, and tree replacement in areas not under a development agreement.

These changes reinforce and provide clarity to the inspection and enforcement processes already in place. Many developers and property owners of projects approved through site review incorrectly refer to the five-year maintenance period, rather than their development agreement which already requires ongoing maintenance. Many single family homeowners are simply unaware of their responsibility to maintain adjacent right-of-way as part of by-right projects for any time period. Others deliberately take advantage of the five-year limit.

The Forestry Division and Planning & Development Services coordinate inspections after planting and begin every enforcement action with educational outreach. Given the inherent life span of a tree, a five-year maintenance standard does not adequately protect newly planted or existing trees in the urban landscape. This language encourages stewardship rather than replacement as the preferred option. Enforcement could be initiated at any time, but is most likely to occur at the time of application review, routine building permit inspection, or during a Forestry Division inventory.

Question 2: If we mandate a tree inventory, are we also requiring it be done by a certified arborist?

Staff response: Yes, in the first reading memo dated February 2, 2010 on page 14 the new subsection requiring a tree inventory states that "The tree inventory shall be prepared by a certified arborist that has a valid contractor license pursuant to chapter 4-28. 'Certified Arborist Contractor License.' B.R.C. 1981." Staff may currently request as

part of a discretionary review submittal that a tree inventory be completed, but has no regulatory authority to do so.

The question was also raised regarding whether a licensed landscape architect could complete a tree inventory. The State of Colorado started licensing landscape architects on January 1, 2008 and although many landscape architects have received licenses already, the number is still growing. Although conducting a tree inventory may seem to be a regular part of training for landscape architects, a key component of a tree inventory is condition assessment. Landscape architects are not typically trained to perform condition assessment beyond basic observations and rarely rely on their own skills for larger mature trees that may require climbing for a thorough evaluation. In such situations, a landscape architect would and should by their code of ethics subcontract to an arborist to provide detailed information. Due to the diversity of both formal education and practical application, landscape architects may also be unskilled at identifying trees. The proposed code language could include the option to allow licensed landscape architects to complete tree inventories and leave it to their discretion to determine if the complexity of a specific site is beyond their abilities. However, current code does not require landscape plans be prepared by landscape architects. Requiring licensed landscape architects to prepare landscape plans could be more comprehensively addressed as its own issue in the future.

Question 3: In the memo dated February 2, 2010 (on page 15), section 9-9-12 of the proposed ordinance, "Landscape and Screening Standards", landscaping plans are required except for detached homes - why?

Staff response: No change is proposed at this time to the current requirements exempting detached homes from the landscape plan submittal. Single family detached homes have never been required to submit landscape plans for several reasons: 1) Cost to the homeowner in preparing and implementing the plan; and 2) The resulting cost to the City in review and inspection time for which additional staff would be required.

Question 4: A piece of what we're looking at was brought to the City because of the chestnut tree damaged and lost on Mapleton Hill which was a Champion Tree. Is there already an inventory of these types of exceptional trees and is it possible to draft an ordinance that protects just those trees?

Staff response: The non-profit Colorado Tree Coalition maintains a Web site at <http://www.coloradotrees.org/champions/registry> that lists state champion trees and their location by city (but not by address), which is updated on an annual basis. Nomination is based solely on size. The Champion Tree list is a recognition program only; no level of protection is offered. As a third party list that may change every year, using it as the source for regulatory action is problematic. Although it could perhaps be used as a starting point to develop a list of locally recognized trees, criteria should be tailored to the City of Boulder and the level of protection Council feels appropriate. As noted during Planning Board discussion and by the Forestry Division, there are many notable trees worthy of some level of protection not captured on a list based on size alone.

Question 5: Can staff provide examples of different circumstances and practical implications, if any, of tree protection? Who does it really affect and under what circumstances?

Staff response: Tree protection examples range across every type of land use development and have the potential to affect the same. It is not a problem specific to only large developments or the single family homeowner. The proposed changes in both phases address the overall urban canopy and recognition/support of individual exceptional trees. Tree protection means supporting young trees during their establishment period when many trees die, and trees at full maturity when they provide the greatest aesthetic and often environmental benefits through shading. Tree protection associated with development requires thoughtful analysis and planning early in the design development, coordination across plans and construction management.

The following examples have all occurred within the last year and are addressed by proposed Phase 1 changes.

Example 1: Forestry staff finds a local tree company has been moving diseased black walnut wood to Longmont, but has no recourse without local regulations.

Example 2: A developer responsible for a large project with several dead trees and broken tree grates waits until they believe the five year landscape guarantee period is complete, rather than provide ongoing landscape maintenance, and then requests the Forestry Division replace dead trees.

Example 3: A single family homeowner required to plant street trees as part of a building permit application informs staff that the newly planted street trees will be removed or allowed to die at the end of the landscape guarantee period, because they're unwanted.

Example 4: A project outside of the original five year landscape guarantee period repeatedly fails to turn on the irrigation to street trees and the trees die. The property owner calls Forestry to replace the dead trees.

The following examples have all occurred within the last year and are partially addressed through Phase 1 changes, but would be further addressed through potential Phase 2 changes.

Example 5: Staff receives a Site Review application for a property with numerous existing mature trees. The initial design does not propose to save any of the trees or offer any information on their condition. Staff requests additional information be provided at the next submittal and suggests a number of trees be incorporated into the site design to meet the Site Review criteria resulting in significant redesign.

Example 6: A large mixed use development does not adequately analyze and plan for the preservation of existing trees resulting in the removal rather than planned transplant of over 40 trees.

Example 7: A single family homeowner decides mature trees located on a property line are a hazard, contrary to an Arborist's assessment, and removes them against the adjacent property owners' and surrounding neighbors wishes.

Question 6: Define what a landscape setback is. Is it private property that needs to be maintained?

Staff response: The Landscape Setback is defined in section 9-16 as: (see Setback, landscaped) *a required setback that is intended to be used exclusively for landscaping purposes.* The landscape setback is private property and if part of an approved landscape plan is required to be maintained per the five-year maintenance period of section 9-9-12(d)(2) B.R.C. 1981 or per the development agreement if part of a discretionary review.

Question 7: Regarding landmarking of trees, will third parties be able to initiate landmark nomination as the current Historic Preservation allows? Provide additional information on the national historic landmark program; does it include trees?

Staff response: Staff has discussed third-party nomination as an option, but has not reached a conclusion on its application and asks Council for direction in this matter. If Council is in general support of a landmark tree program, it could be accomplished by adding specific nomination criteria for trees to the existing Historic Preservation ordinance or by creating a stand alone ordinance and process.

"National Historic Landmarks are buildings, sites, districts, structures, and objects that have been determined by the Secretary of the Interior to be nationally significant in American history and culture."¹ A national level program recognizing landmark trees, America's Historic Tree Register², is jointly administered by the U.S. Forest Service and Community Forestry Program and propagates cuttings from nominated trees. Trees included in this program are connected to historical events, famous people or places, or nominated due to age and uniqueness. The program relies on the power of recognition and the public's interest in history and not on direct regulation. There is also a National Register of Big Trees³ which is again a recognition program. Boulder's Historic Preservation Ordinance does not specifically exclude trees by including "features and "sites", but has not been used to date to nominate an individual tree or site without an associated structure(s). The general criteria for nomination and review do not address many of the long issues that must be addressed with a living organism.

Question 8: In the memo dated February 2, 2010 on page 14, line 17, can staff describe a tree inventory and protection plan? What is included and what is it intended to do?

¹ <http://www.nps.gov/nhl/QA.htm#1>

² <http://www.americanforests.org/htr/index.php>

³ <http://www.americanforests.org/resources/bigtrees/>

Staff response: Submitting a tree inventory provides information, but may not adequately analyze the potential for protecting a tree through construction or communicate the extent of protection needed for any individual tree to survive. On the majority of sites, this is a single plan summarizing the location size, species and condition of trees and indicating if the tree will be preserved or removed. It acts as a resource for the rest of the plan set as typically only the graphic representation, but not the written information on the trees is included on other plans (landscaping, grading, site, etc). Chapter 3.05 of the Design and Construction Standards (DCS) describes protection requirements and includes a Sample Landscape Protection Plan (detail 3.11).

Question 9: In the memo dated February 2, 2010 on page 15, the ordinance describes a landscaping plan and places obligation on the property owner to maintain property in accordance with a plan. Is this for a discretionary review only? If a tree dies and an owner wants to replace with another species, do they need to modify the approved plan?

Staff response: Section 9-9-12(d) applies to all developments requiring a landscape plan whether by-right or approved through discretionary review. Thresholds for by-right development requiring landscape plans are specified in section 9-9-12(b) B.R.C 1981. To date, a Minor Modification or some other means of documenting such a change has not been required and is not proposed for either phase of this project. If the tree was on private property, the replacement is ongoing maintenance and the replacement species, if chosen from the approved street tree list, is the decision of the owner. The intent of the original approved plan should be maintained, but staff is not aware of a situation in which large numbers of trees were replaced resulting in a change to intent. If it was to replace a public street tree, the owner is required to choose a tree from the approved street tree list found in Chapter 3 of the DCS.

Question 10: What problem will be solved by Arborist Certification?

Staff response: Arborist are often the first to identify, treat and properly dispose of trees infected with many common problems that can devastate the urban canopy, including Dutch elm disease, Thousand Cankers disease of black walnut, mountain pine beetle and emerald ash borer. Licensing local arborists would help ensure all applicable rules pertaining to proper disposal of diseased wood are followed, a problem identified by the Forestry Division.

Additionally, the proposed arborist license will also provide protection for homeowners. Currently anyone can do tree work in Boulder regardless of public liability insurance coverage. The proposed arborist license requires all companies performing tree work carry a minimum amount of liability insurance consistent with other contractor license types. Licensing local arborists would help ensure all local, state and federal standards are followed including standards for pedestrian, bike and vehicular traffic control.

Question 11: Does the landscape guarantee apply only to landscaping described in a Site Review application?

Staff response: No, the landscaping guarantee applies to all required landscape plans whether by-right or discretionary.

Question 12: Would the proposed ordinance change how downtown tree maintenance and replacement is currently being handled, i.e. by the Forestry Division?

Staff response: This is a complicated question as it potentially deals with both public and private, by-right and discretionary review projects.

The majority of current Forestry efforts for public street trees in the downtown area focus on:

- Planting new trees where mature trees are declining or have died. This can occur adjacent to by-right projects, discretionary review projects or older development sites where development history is not known.
- Planting new trees adjacent to by-right developments where recently planted trees have died. Street tree planting for by-right projects is only required when certain valuation thresholds are met. Replacement planting by Forestry typically includes trees beyond the five-year maintenance period, but due to the time and difficulty of current enforcement, sometimes includes trees within the five-year period.
- Planting new trees and installing infrastructure to fill in gaps in the streetscape in locations which have not previously had linear street tree plantings. Such areas include by-right projects where new trees were not a requirement or older development sites. These areas are limited, but some still exist.
- Tank watering newly planted trees. Many planting sites in downtown are not irrigated or have irrigation systems that are not functional. It is important to note that even when an irrigation system is present and functional, new trees require water beyond what traditional irrigation systems can deliver for their first few years during establishment, particularly in urban settings.
- Upgrading or adding infrastructure including tree grates and/or tree guards with associated concrete work and irrigation to existing trees.

In the majority of situations, the proposed ordinance would not change how tree maintenance is currently performed in the downtown area. If proposed ordinance changes pass, staff would enforce tree replacement for only those discretionary projects that received a CO within the past 5 years. These developments were already aware tree replacement was required for the first five years. Staff could also enforce tree replacement for projects going forward.

The proposed code changes clarify the responsibility of the adjacent property owner to maintain both public and private trees for long term health per their original approved landscape plan. The area of potential change involves replacement of trees and infrastructure due to lack of continuous irrigation, damage from environmental factors such as mowing, and improper selection and/or installation of infrastructure.

Question 13: While it removes the 5-year limitation in 9-9-12(d)(2) for maintaining the landscaping in a plan, the added section 9-9-13(h) seems to say that street or alley trees have to survive for only “one year from the issuance of a certificate of occupancy or certificate of completion.” Please clarify. If we are imposing a long-term maintenance obligation on the property owner, when will the money be released from escrow?

Staff response: The proposed change to section 9-9-13(h) is in addition to, not instead of, any maintenance period. It is, however, specific to required street and alley trees and not the entire approved landscape plan. The landscape maintenance section formerly included the ability for the city to require financial guarantees. This language was removed from the code in 1997 because of administrative tracking problems and resulting lack of use. With the advances of technology and the City’s digital permit system, tracking is now streamlined and easily accomplished. The first year after planting is a very good indicator of a young tree’s survival and provides staff an opportunity to require replacement early during the maintenance period, rather than at four or five years. Escrow would be released at the end of the first year, but the maintenance period would continue as specified in the code. This is especially important for large developments in which some mortality is expected, but not often budgeted for as part of ongoing maintenance. This situation may also prevent developers from passing on the cost of replacing trees to homeowners in housing developments. The escrow would guarantee that money is available for replacement.

Question 14: For Phase 2, Denver limits tree removal in front yard setbacks. There are times when such an ordinance would protect the beauty of the street, without limiting what can be built on someone’s property. It would not seem unreasonable for the City to afford some protection for the beauty of the street--the public space--without unduly restricting property owners from reconfiguring their lot and landscaping. Does staff see a way forward in Phase 2 where such protection could be afforded for trees in the setback?

Staff response: Staff suggests Council discuss this question at Second Reading on March 2nd, but believes it would be an appropriate Phase 2 option for further development. Specific criteria would be needed to determine what falls into this protected zone and a process to review when removal or impacts may be permitted. In particular, development may not be permitted in the setbacks, but existing tree roots and canopies can stretch far outside of the setback into the building envelope. Situations surely exist in which a tree would lose too much of a root system and become a hazard without any excavating within a setback.

Question 15: Would the proposed changes prevent the removal of healthy mature trees, such as the cottonwoods removed in South Boulder (referencing 1050 Green Circle) in the last few years?

Staff response: Proposed Phase 1 code changes would not prevent such a situation from happening again. Phase 2 code changes could include protection for private trees, but it is unclear if condition, size and species criteria would include the specific trees in this

situation. Direction is requested from Council on the appropriate scope of Phase 2 changes.

Question 16: What are the costs associated with each of the provisions in the proposed ordinances and are there estimates of enforcement for these provisions? Include the overall fiscal impact to home/property owners for review, surveys, etc. and enforcement costs.

Staff response: See the detailed discussions and analysis for each proposed Phase 1 change and potential Phase 2 changes included in the first reading memo. In summary:

Arborist Certification: Certified Arborists will be charged an annual fee of \$125. Staff time is minimal, a few minutes each, to issue or renew a license. Forestry Division staff anticipates the majority of licenses will be certified through reciprocity and certification through the International Society of Arboriculture, but is also able to provide practical examinations if deemed necessary. Perhaps 30 qualified companies exist in the northern Front Range who would request a license. Additional cost to the public related to Phase 1 changes are none to minimal. See additional responses below.

Diseased Trees: Requiring a Certified Arborist to remove diseased wood may cost the property owner more than hiring a landscape company or handyman service or completing the work personally, but an arborist may also be the most efficient of the services available resulting in lower costs. Per the proposed ordinance language, this requirement will be used only in extreme situations in which the spread of an infectious disease would result in much higher costs to all involved. The cost for tree removal varies considerably based on the size of the tree and accessibility. A typical cost range is \$200 to \$2,000 and beyond for extremely large trees with difficult site access. As an example, the Black Walnuts removed across the city averaged around \$1,200 per tree for removal.

Mandatory Tree Inventory for Discretionary Reviews: This change may actually reduce staff time during the review process by providing information earlier in the process than typically received. This information is needed to determine compliance with specific Site Review criteria which includes "...the preservation of or mitigation of adverse impacts to natural features, including, without limitation, healthy long-lived trees..." It may also help avoid costly project redesign for the applicant in response to city feedback late in the review process. This requirement also has a basic recognition or education component that compares the value of existing trees to all other physical constraints. Tree inventories are typically completed based on an hourly fee ranging from \$85 to \$150. A simple site with a few trees could require an hour to complete and a complex site five or six hours.

Trees Crossing Property Lines (Trees in Adjacent Setbacks): The cost of this additional information will vary with the complexity of the site and adjacent properties. Compared to the overall submittal requirements for most applications, adding tree symbols and some basic information is a tiny fraction of the overall project and likely to take only a few minutes to under an hour for the vast majority of projects. It may also prevent costly redesign late in the project.

Landscape Guarantee: If property owners are already maintaining their required street trees and/or approved landscape plans, no additional cost will be incurred. For those not maintaining, the mulch or sod-free landscaping (to prevent mower damage) around the base of a tree costs a few dollars and minutes a year. Water needs vary based on the size of the tree, exposed ground/shade cover, rainfall in a particular year, and species of tree. Any development that is required to have an irrigation plan is also required to install irrigation to the street planting strip.

This change would require that irrigation be maintained and operational regardless of the status of the site. There are a number of examples in which a property in transition from construction or sale turns off irrigation for extended periods of time which can significantly impact existing trees. For single family homes which are typically not required to have a fully automated irrigation system, several scenarios are possible. If irrigation has been consistently provided to street trees, it is already accounted for in their water budget and no change occurs. Water is billed and budgeted per 1,000 gallons anticipating minor use changes over time. The additional irrigation of street trees, if done efficiently, is unlikely to increase the overall budget. In rare cases in which a family is so close to the maximum of their water budget and at risk of increasing their rates through additional irrigation, a Water Budget Adjustment may be requested to accommodate the new water needs. There is no fee for the adjustment and it does not expire.

In addition, reduction in staff time inspecting, educating and following up with property owners during the existing five-year maintenance period is likely; the cost to the City in tree replacement programs could be reduced or spent on streetscape beautification programs; and a potential for a reduction in water use exists if the urban canopy can be increased and the urban heat island effect reduced.

Potential Phase 2 Changes

Landmark Tree Designation: Additional direction from Council is needed to further analyze the cost of this option. The existing Landmarks Program charges \$25 for an Individual Landmark Fee and does not charge for Landmark Alteration Certificates. Demolition also incurs review fees. Demolition criteria will help inform the time required for the applicant and staff. Staff time could be significant if the public responds positively to this option. This application could not be made without a detailed assessment of the condition of the tree completed by a certified arborist. Council should indicate to staff if full cost recovery is desired as part of such a program.

Permits for the removal of some trees: The cost to the public and staff time is variable for this option depending on the criteria used for review. Comparing existing administrative reviews, staff time will range from two to six hours for a typical application and application fees range from \$168 to \$757 for most applications. Council should indicate to staff if full cost recovery is desired as part of such a program.

The permit preparation would require detailed assessment of the tree's condition typically completed by a certified arborist. Fees will vary based on the complexity and requirements such as whether a visual inspection which typically start at \$100 or an aerial "climbing" inspection is required starting at \$175. For comparison, tree removal costs

depend upon tree size and location. Average removal costs for public trees greater than 30 inches in diameter are \$900; private tree removal costs may be higher due to proximity to structures.

Mitigation standards for the removal of private trees for projects in Site Review:

This potential Phase 2 work would provide clarity on required mitigation. It responds to specific site review criteria referenced above in the discussion regarding Mandatory Inventories. Mitigation is presently determined on a case by case basis. Mitigation standards could act as an incentive to incorporate more healthy mature trees into the design process rather than assuming the easiest solution is their removal. Clear standards are likely to reduce staff time. The impact to the owner/developer of a property will be dependent on Council direction and the final details of a mitigation proposal.

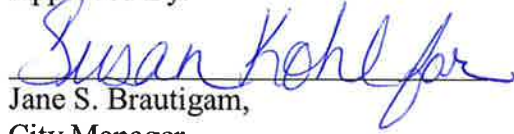
QUESTIONS FOR CITY COUNCIL REGARDING PHASE 2:

1. Should individual private trees as defined by size, species, location etc. have a special recognition program and if so, should that program include a regulatory process such as the landmark program or a tree removal permit?
2. Should proposed tree protection changes provide general support for the urban canopy or is that adequately accomplished through existing regulations?
3. Should trees on private property be generally protected and if so, should protection be limited to setbacks or some other defined area?
4. Should private trees, removed as part of a discretionary review, have mandatory mitigation requirements such as the planting of additional trees on or off site, transplanting requirements if feasible, or monetary compensation?

NEXT STEPS:

If City Council adopts the ordinance, staff will begin preparing for implementation in early April (30 days after adoption). Based on Council discussion and direction, Staff will also continue to develop Phase 2 tree protection options during 2010, returning to Planning Board and City Council for comment, recommendation and adoption.

Approved By:



Jane S. Brautigam,
City Manager

ATTACHMENTS:

- A: Proposed Code Language
- B: Options in Detail

ORDINANCE NO. 7712

AN ORDINANCE ESTABLISHING REQUIREMENTS FOR A CERTIFIED ARBORIST LICENSE AND OTHER REQUIREMENTS RELATED TO THE PLANTING, CUTTING, REMOVING, OR APPLYING PESTICIDES TO ANY TREES; AMENDING TITLE 4, "LICENSES AND PERMITS," B.R.C. 1981; AMENDING CHAPTER 6-6, "PROTECTING TREES AND PLANTS," B.R.C. 1981; AND SETTING FORTH RELATED DETAILS.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BOULDER, COLORADO:

Section 1. Title 4, "Licenses and Permits," B.R.C. 1981, is amended by the addition of a new Chapter 28, to read:

TITLE 4 LICENSES AND PERMITS**Chapter 28 Certified Arborist Contractor License****4-28-1 Legislative Intent.**

The purpose of this chapter is to protect the public health, safety, and welfare by licensing persons who plant, cut, prune or remove trees in the city.

4-28-2 License Required.

- (a) No person shall engage in the business of planting, cutting, pruning, removing or applying pesticides to any trees on public or private property within the city for commercial gain or profit without first obtaining from the city manager a license under this chapter.
- (b) Any licensee must perform all tree related work in the city in accordance with all requirements adopted by the city manager, and all city, state, and federal laws. Any licensee not complying with the requirements of this chapter may have its license suspended or revoked pursuant to the provisions of 4-1-10, "Revocation of Licenses," B.R.C. 1981.
- (c) All motor vehicles and other major equipment used by any licensee hereunder in conducting the licensed tree services must be clearly identified with licensee's business name and phone number.

4-28-3 Application for License.

An applicant for a contractor license shall:

- 1 (a) Apply on forms furnished by the city manager, provide such information relating to the
2 applicant's competence, education, training, and experience as the city manager may
3 require;
4 (b) Pay the fee prescribed by section 4-20-63, "Arborist License Fee," B.R.C. 1981; and
5 (c) Provide evidence of insurance coverage required by section 4-1-8, "Insurance Required,"
6 B.R.C. 1981.

7 **4-28-4 License Application and Qualifications.**

- 8 (a) An applicant for a license under this chapter shall show proof of current International
9 Society of Arboriculture certification or an equivalent exam.
10 (b) The city manager may approve a license under this chapter for persons that have
11 demonstrated equivalent qualifications to those described in subsection (a) above.

12 **4-28-5 Authority to Deny Issuance of License.**

- 13 (a) The city manager may deny an application for a license under this chapter upon a finding of
14 any of the conditions set forth in subsection 4-1-9(a), "Authority to Deny Issuance of
15 Licenses," B.R.C. 1981, or upon a determination that:
16 (1) The applicant has had any contractor's license revoked or suspended; or
17 (2) The applicant has previously failed to comply with the ordinances and regulations of the
18 city relating to conducting any contracting business licensed by this code.
19 (b) If the city manager denies a license application under this section, the manager shall follow
20 the procedures prescribed by subsection 4-1-9(b), "Authority to Deny Issuance of Licenses,"
21 B.R.C. 1981.

22 **4-28-6 Contractor Responsibilities.**

23 A contractor licensed under this chapter is responsible for all work performed under each
24 contract executed pursuant to the license, whether the contractor, an employee, or a
25 subcontractor performs the work.

26 **4-28-7 Revocation and Suspension of License.**

27 The city manager may suspend or revoke a license issued under this chapter for the grounds and
28 under the procedures prescribed by section 4-1-10, "Revocation of Licenses," B.R.C. 1981.
Grounds for suspension or revocation include, without limitation, failure to maintain required
insurance.

29 **4-28-8 Renewal of License.**

30 A existing licensee under this chapter who has passed an examination designed by the city
31 manager to test the qualifications for the category of license requested, may renew the license by

1 completing an application on forms furnished by the manager, filing the certificate of insurance
2 prescribed by section 4-1-8, "Insurance Required," B.R.C. 1981, and paying the fee prescribed
3 by section 4-20-63, "Arborist License Fees," B.R.C. 1981.

4 **4-28-9 Term of License.**

5 The term of the license issued under this chapter is twelve months from its date of issuance.

6 Section 2. Chapter 4-20, "Fees," B.R.C. 1981 is amended by the addition of a new
7 section 4-20-63, to read:
8

9 **4-20-63 Arborist License Fee.**

10 An applicant for an arborist license shall pay an annual fee of \$125.00.

11 Section 3. Section 6-6-2, B.R.C. 1981 is amended to read:
12

13 **6-6-2 Removal of Dead, Diseased, or Dangerous Trees.**

- 14 (a) The city manager may enter upon any premises without a warrant to inspect all trees and
15 plants in the city.
- 16 (b) If the city manager finds that there exist on any private property in the city dead trees or
17 overhanging limbs that pose a danger to persons or property, the manager will notify the
18 owner, lessee, agent, occupant, or other person in possession or control of the property upon
19 which the condition exists of the duty to remedy the condition within fifteen days from the
20 date of the notice or such shorter time as the manager finds appropriate in view of the nature
21 and extent of the condition.
- 22 (c) If the city manager determines that any tree growing on private property within the city is
23 afflicted with any dangerous or infectious insect infestation or disease, the manager will
24 notify the owner, lessee, agent, occupant or other person in possession and control of the
25 property of the condition and order such person to take specific prescribed measures that the
26 manager determines are reasonably necessary to cure the infestation or disease and to
27 prevent its spread, within fifteen days from the date of the notice or such time as the
28 manager finds appropriate in view of the nature and extent of the condition. If necessary to
address a dangerous or infectious insect infestation or disease, the city manager may require
that work shall be completed under the supervision of a certified arborist that has a valid
contractor license pursuant to chapter 4-28, "Certified Arborist Contractor License," B.R.C.
1981.

1 Section 4. Section 6-6-6, B.R.C. 1981 is amended by the addition of a new subsection
2 (g) to read:

3
4 **6-6-6 Protection of Trees and Plants.**

5 ...

6 (g) No person shall engage in the business of planting, cutting, pruning, removing or applying
7 pesticides to any trees on public or private property within the city for commercial gain or
8 profit without first obtaining from the city manager a license under this chapter.

9 Section 5. Section 6-6-7, B.R.C. 1981 is amended by the addition of a new subsection
10 (d) to read:

11
12 **6-6-7 Mitigation Of Trees Or Plants Removed Or Destroyed.**

13 No person shall remove or destroy any tree or plant in the public right-of-way without first
14 having a plan approved by the city manager for the mitigation of the loss of such tree or plant.
15 The removed or destroyed tree or plant shall be replaced in an amount equivalent to the value, as
determined by the city manager, of the tree, shrub, or plant that existed prior to loss, by:

16 ...

17
18 (d) All plantings shall be completed under the supervision of a certified arborist that has a valid
19 contractor license pursuant to chapter 4-28, "Certified Arborist Contractor License," B.R.C.
1981.

20
21 Section 6. Chapter 6-6, "Protection of Trees and Plants," B.R.C. 1981 is amended by the
22 addition of a new section 6-6-10, to read:

23 **6-6-10 City Manager Authorized to Issue Rules**

24 The city manager is authorized to adopt rules, pursuant to Chapter 1-4, "Rulemaking," B.R.C.
25 1981, that are reasonably necessary to implement the requirements of this chapter.

26 Section 7. This ordinance is necessary to protect the public health, safety, and welfare of
27 the residents of the city, and covers matters of local concern.
28

1 Section 8. The City Council deems it appropriate that this ordinance be published by title
2 only and orders that copies of this ordinance be made available in the office of the city clerk for
3 public inspection and acquisition.

4 INTRODUCED, READ ON FIRST READING, AND ORDERED PUBLISHED BY
5 TITLE ONLY this 2nd day of February, 2010.
6

7
8 _____
Mayor

9 Attest:

10
11 _____
12 City Clerk on behalf of the
13 Director of Finance and Record
14

15 READ ON SECOND READING, PASSED, ADOPTED, AND ORDERED
16 PUBLISHED BY TITLE ONLY this 2nd day of March, 2008.
17

18
19 _____
Mayor

20 Attest:

21
22 _____
23 City Clerk on behalf of the
24 Director of Finance and Record
25
26
27
28

ORDINANCE NO. 7713

AN ORDINANCE ESTABLISHING ADDITIONAL TREE PROTECTION STANDARDS, AMENDING CHAPTER 8-2, B.R.C. 1981 CREATING AN AFFIRMATIVE OBLIGATION OF ADJACENT PROPERTY OWNERS TO MAINTAIN STREET TREES; AMENDING TITLE 9, LAND USE CODE B.R.C. 1981 REQUIREMENTS FOR SITE REVIEW AND THE LANDSCAPING STANDARDS, AND SETTING FORTH RELATED DETAILS.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BOULDER, COLORADO:

Section 1. Chapter 8-2, "Streets and Sidewalks," B.R.C. 1981 is amended by the addition of a new section 8-2-25, to read:

8-2-25 Adjacent Owners' Duty to Maintain Street Trees.

A property owner shall maintain required street trees on or adjacent to the owner's property in the public right of way, by providing landscaping or a mulched sod-free base around the tree and sufficient irrigation to sustain the life of the tree.

Section 2. Subsections 9-2-14(d) and (h), B.R.C. 1981, are amended to read:

9-2-14 Site Review.

(d) Application Requirements: An application for approval of a site plan may be filed by any person having a demonstrable property interest in land to be included in a site review on a form provided by the city manager that includes, without limitation:

(13) A general landscaping plan at the time of initial submission to be followed by a detailed landscaping plan prior to or as a condition of approval showing the spacing, sizes, and specific types of landscaping materials, quantities of all plants and whether the plant is coniferous or deciduous. All trees with a diameter of six inches and over measured fifty-four inches above the ground on the property or in the landscape setback of any property adjacent to the development shall be shown on the landscaping plan with a statement of whether the applicant proposes to preserve the tree.

(18) A tree inventory and protection plan that includes the location, size, species and general health of all trees with a diameter of six inches and over measured fifty-four inches above the ground on the property or in the landscape setback of any property adjacent

1 to the development. The inventory shall indicate which trees shall be preserved or
2 removed. The tree inventory shall be prepared by a certified arborist that has a valid
3 contractor license pursuant to chapter 4-28, "Certified Arborist Contractor License,"
4 B.R.C. 1981.

5 (h) Criteria for Review: No site review application shall be approved unless the approving
6 agency finds that:

7 (2) Site Design: Projects should preserve and enhance the community's unique sense of
8 place through creative design that respects historic character, relationship to the natural
9 environment and its physical setting. Projects should utilize site design techniques which
10 enhance the quality of the project. In determining whether this subsection is met, the
11 approving agency will consider the following factors:

12 (C) Landscaping:

13 (ii) Landscape design attempts to avoid, minimize or mitigate impacts on and off
14 site to important native species, healthy long-lived trees, plant communities of
15 special concern, threatened and endangered species and habitat by integrating
16 the existing natural environment into the project;

17 Section 3. Subsection 9-9-12(d), B.R.C. 1981, is amended to read:

18 **9-9-12 Landscaping and Screening Standards.**

19 (d) General Landscaping and Screening Requirements:

20 (1) Landscaping Plan: A landscaping plan designed in accordance with this section and
21 sections 9-9-13, "Streetscape Design Standards," and 9-9-14, "Parking Lot Landscaping
22 Standards," B.R.C. 1981, shall be provided for all developments except detached
23 dwelling units. The site plan shall include the following:

24 (K) The location, size and species of all existing trees on the property and within the
25 landscape setbacks of all properties adjacent to the development site,

26 (2) Landscape and Screening Maintenance and Replacement: The property owner shall
27 maintain the landscaping plan as originally approved, and provide for replacement of
28 plant materials that have died or have otherwise been damaged or removed, and
maintenance of all non-live landscaping materials including, but not limited to, fencing,
paving, and retaining walls, ~~for a period of five years~~ from the issuance of a certificate of
occupancy or certificate of completion.

1 Section 4. Section 9-9-13, B.R.C. 1981 is amended by the addition of a new subsection

2 (h), to read:

3 **9-9-13 Streetscape Design Standards.**

4 ...

- 5 (h) The street and alley tree installations shall be considered complete if the required trees
6 survive for one year from the issuance of a certificate of occupancy or certificate of
7 completion. The city manager is authorized to require an applicant provide the financial
8 guarantee consistent with the requirements of section 9-2-20, " Required Improvements and
Financial Guarantees," B.R.C. 1981. The financial guarantee will be released after one year,
after an inspection that confirms the trees is in good health.

9 Section 5. Subsection 9-12-6(a), B.R.C. 1981, is amended to read:

10 **9-12-6 Application Requirements for a Preliminary Plat.**

- 11 (a) Application Requirements: Any preliminary plat submitted for subdivision approval shall be
12 drawn to a scale of no less than one inch equals one hundred feet, and of a scale sufficient to
13 be clearly legible, including streets and lots adjacent to the subdivision. The preliminary plat
14 may be an application under section 9-2-14, "Site Review," B.R.C. 1981, if it meets both the
requirements of this section and those of chapter 9-2, "Review Processes," B.R.C. 1981. The
applicant shall include on the preliminary plat or in accompanying documents:

15 ...

- 16 (6) The location of structures and trees of ~~five~~six-inch caliper or more on the property and
17 approximate location of structures off the property within ten feet of the proposed plat
18 boundary;

19 ...

20 Section 6. Section 9-16-1, B.R.C. 1981, is amended by the addition of the following
21 definition, to read:

22 **9-16-1 Definitions**

23 ...

24 "Healthy, long lived tree" means a tree that is:

- 25 (1) Healthy and classified as being in fair or better condition [typically meaning more than
26 sixty percent of the root and canopy structure are in tact as determined by an expert in
tree or landscape appraisal;
- 27 (2) Not listed on the state of Colorado noxious weed list;
- 28 (3) Not listed by the city manager as a noxious weed or undesirable tree;

1 (4) Is in a sustainable location that does not threaten to public health, safety, and welfare.

2 Section 7. This ordinance is necessary to protect the public health, safety, and welfare of
3 the residents of the city, and covers matters of local concern.

4 Section 8. The City Council deems it appropriate that this ordinance be published by title
5 only and orders that copies of this ordinance be made available in the office of the city clerk for
6 public inspection and acquisition.
7

8
9 INTRODUCED, READ ON FIRST READING, AND ORDERED PUBLISHED BY
10 TITLE ONLY this 2nd day of February, 2010.
11

12
13 _____
Mayor

14 Attest:

15
16 _____
17 City Clerk on behalf of the
Director of Finance and Record

18
19 READ ON SECOND READING, PASSED, ADOPTED, AND ORDERED
20 PUBLISHED BY TITLE ONLY this 2nd day of March, 2010.
21

22
23 _____
Mayor

24 Attest:

25
26 _____
27 City Clerk on behalf of the
Director of Finance and Record
28

Tree Protection Options Identified

The following options were identified through the research process completed by staff. Based on initial research, staff discussion and anticipated analysis needed to fully identify cost benefit comparisons, potential Phase 2 changes require additional research as directed by Planning Board and City Council.

1. Arborist Certification

Boulder is one of the few Front Range communities that does not require some level of certification for tree work, including assessment, maintenance and removal. Longmont, Denver, Castle Rock, Fort Collins and Parker, to name a few, all have some variation of contractor licensing related to trees. Currently, anyone may perform tree work in Boulder. Staff recommends using the International Society of Arboriculture (ISA) certification as a basic level of competence. Longmont and Denver currently use this system and we already have reciprocal contractor licensing with these communities.

Pros: Arborist are often the first to identify, treat and properly dispose of trees infected with many common problems that can devastate the urban canopy including Dutch elm disease, Thousand Cankers disease of black walnut, mountain pine beetle and emerald ash borer. Licensing local arborists would help ensure all applicable rules pertaining to proper disposal of diseased wood were followed. Practical exams, if determined to be necessary, would be administered by the city Forester. Applications and renewals would be reviewed by the city Forester and could be administered through the Landlink contractor license process. Cost would be recovered under fees. The city Forester routinely contracts with Certified Arborists to assist in the maintenance of public trees and the city Landscape Architect requests tree inventories also be completed by Certified Arborists. This new license type would review these qualifications and provide the same level of knowledge to the general public now used by the city. The benefits of Arborist Certification reach far beyond the planning process.

Cons: Additional staff time will be required to adapt existing license application forms to the new license type, contact and test all companies currently doing tree work in Boulder. Some additional cost is expected both to contractors to receive the license and potentially to the public when completing work on public trees.

2. Protection of Trees and Plants

Current language within Chapter 6-6 B.R.C., "Protection of Trees and Plants," is insufficient to prevent movement of walnut wood infected with a new tree disease first discovered within the city of Boulder, Thousand Cankers Disease of walnut. This disease has the potential to devastate black walnut populations within their native range in the eastern U.S. if diseased walnut wood is allowed to move outside of infested areas.

Current ordinance language allows the city to require removal of diseased trees on private property and provides an administrative warrant process to have trees removed if the property owner does not comply. It does not, however, give the City Manager flexibility to adopt new rules and regulations prohibiting movement of diseased wood or allow for criminal penalties should the property owner remove the tree and keep the wood or move wood outside of the city.

City staff was aware of several instances of diseased walnut wood leaving city limits but was unable to prevent it. The proposed changes would close these loopholes and allow for better enforcement.

Proposed language allowing the City Manager to issue new rules is consistent with that from other city code (i.e., Chapter 6-2 B.R.C., "Weed Control"). The proposed language for penalties is consistent with subsection 5-2-4 B.R.C., "General Penalties".

Pros: These changes reinforce and increase the inspection and enforcement processes already in place. Allowing criminal penalties for non-compliance will better protect trees on both a state and national level by preventing spread of potentially epidemic tree insect and/or disease problems.

Cons: Although this code change creates additional prosecution options, enforcement for the removal of diseased wood will continue to be a challenge.

3. Mandatory Tree Inventory for Discretionary Reviews

This change provides staff additional opportunity for comment and design assistance during the Site Review process. Current Site Review submittal requirements do not include a tree inventory including species, size and condition identification as a matter of course. The case manager or landscape architect may request an inventory after completing review of the initial submittal package. A tree inventory is typically prepared by a surveyor who locates all the trees on a property and Certified Arborist who identifies the species and condition of each tree. If the site is heavily wooded, only trees over six inches in caliper are typically surveyed. In more urban settings, no trees may exist on a site. The level of complexity of such a survey varies greatly depending on a site, but always provides valuable information during the review process. The proposed change of Item 3, trees in adjacent setbacks, would ideally be included.

Pros: High quality information provides a more comprehensive analysis on the part of the developer and a more complete review by city staff resulting in a shorter timeline within the Site Review process. This change may actually reduce staff time during the review process. This requirement also has a basic recognition or education component that compares the value of existing trees to all other physical constraints.

Cons: A key component of the survey is to include all trees on a site regardless of the intention to remove the trees as a result of development. Although a detailed survey does add some additional cost to the owner/developer, it is likely to be significantly less than a costly project redesign in an effort to preserve high quality mature trees only after the start of the city review process. Removing trees prior to initial submittal is also a potential problem. Phase 2 code amendments could address this issue by creating retroactive timelines for removal; for example, evidence of any tree removed within a defined period of time, typically six months to one year prior to Site Review application review would be subject to all tree inventory and protection requirements.

4. Trees Crossing Property Lines (Trees in Adjacent Setbacks)

This proposed change is an information gathering effort to supplement current submittal requirements. Staff recommends adding a requirement that all Site Review and Building Permit applications that are required to submit a landscape plan also provide information on all trees six inches or more in caliper within adjacent property setbacks. Tree roots and canopies often cross property lines. Staff currently relies on aerial photography to alert them to potential conflicts and must then follow up by completing site visits to verify information. Trees having a trunk on an adjacent property, but root systems and canopies clearly crossing property lines, shall be included on all landscape plans and tree inventories. Trunk location is necessary to determine the approximate development impact and can be determined by visual observation, high quality aerial analysis or by gaining permission to survey trees on properties adjacent to the development site. Canopies and therefore an approximation of the root system, on the development site can be accurately surveyed. A reasonable level of impact requires case-by-case evaluation.

Pros: Information provided earlier in the review process would facilitate impact analysis on the part of the owner/developer and city staff. Providing this information as early as possible in the design and review process would save significant staff time spent on gathering information not currently required yet important for review.

Cons: This code amendment does not protect trees adjacent to development sites as a matter of course. Conflicts between development and trees on adjacent sites will still arise from time to time that may not have a solution agreeable to all parties involved. This requirement also raises questions of how the data will be gathered. Trespassing is not a solution and is in no way encouraged through this change. Some financial impact to the property owner/developer is expected and will vary depending on the number of existing trees and complexity of the site. The cost of adding trees on adjacent sites to an already required site or landscape plan is very low compared to the greater cost of preparing a survey and construction drawings.

How to determine a consistent area around the development site also needs to be addressed. On adjacent lots with no required setback, no trees may be impacted. On adjacent lots with a large setback, many trees may be affected. Staff recommends an approach that would capture the greatest number of trees while not including trees that would be unaffected.

5. Landscape Guarantee

The Land Use Code currently requires a five year maintenance guarantee on all living and non-living materials. Staff recommends removing the five year limit as a means of encouraging long term maintenance of all trees, public and private, and adding code language clarifying long term maintenance responsibilities of public trees including the ability to hold escrow to guarantee survival or replacement one year after planting. Given the inherent life span of a tree, a five year maintenance standard does not adequately protect newly planted or existing trees in the urban landscape. The City of Fort Collins is one example of a Front Range community taking this approach. Article 3.2.1(I)(5) of their Site Planning and Design Standards states:

Maintenance. Trees and vegetation, irrigation systems, fences, walls and other landscape elements shall be considered as elements of the project in the same manner as parking, building materials and other site details. The applicant, landowner or successors in interest shall be

jointly and severally responsible for the regular maintenance of all landscaping elements in good condition. All landscaping shall be maintained free from disease, pests, weeds and litter, and all landscape structures such as fences and walls shall be repaired and replaced periodically to maintain a structurally sound condition.

This language presents a broad common sense approach which encourages stewardship rather than replacement as the preferred option. Enforcement could be initiated at any time, but is most likely to occur at the time of application review, routine building permit inspection or during a Forestry Division inventory. Code changes are required in several sections to complete this change.

Pros: These changes reinforce and provide clarity to the inspection and enforcement processes already in place. Many developers and property owners of projects approved through site review incorrectly refer to the five year maintenance period, rather than their development agreement which requires ongoing maintenance. Many single family homeowners are simply unaware of their responsibility to maintain adjacent right-of-way.

Cons: Public perception of such a change may be mixed. Some education and outreach is anticipated as a result of this change. Internal process for holding escrow is already in place, but additional staff time (1-2 hours per week) will be needed to process escrow held for street tree planting.

Potential Phase 2 Changes:

6. Mitigation Requirements for Discretionary Review Projects

This proposed change recognizes the benefits trees provide for the greater community. Based on development patterns and climate limitations, trees in Boulder often do not reach even ten inches in diameter (measured four feet six inches from the ground). This proposed change affects projects requiring discretionary review including single family development. Many project sites are heavily disturbed prior to any application review. Some developers assume that the less expense and more profitable approach to site design is clearing all vegetation. Thorough site analysis is often not performed.

Undesirable or diseased and dying trees would be excluded from this review process based on the assessment of a Certified Arborist. Mitigation would be required in the form of increased landscaping requirements and/or fees for the removed trees. Fees collected would only be available to directly fund the planting and maintenance of public trees. Equitable mitigation standards need to be developed based on input from the Planning Board and City Council. Mitigation is currently required to remove public trees. The need for consistent public and private tree mitigation requirements would be part of this analysis.

Pros: This change recognizes the significance of trees at different life stages, trees not yet old or large enough to be recognized as having some unique value. Required mitigation adds value to healthy mature trees not currently recognized through the development process. Required mitigation is likely to have a significant positive impact to the overall urban canopy both through increased preservation and increased ability to plant and maintain trees through the funds

generated. This review process could easily be incorporated into the current landscape review with little additional staff time.

Cons: Public reaction to this code change could be significant if it is seen as prohibiting development and economic growth or arbitrarily applied. On-site mitigation is difficult if not impossible to achieve in many areas. Although the existing review process could easily incorporate assessment and mitigation requirements, significant staff time may be needed for enforcement of such a change.

7. Preservation of Significant Trees by Requiring Removal Permits

The goal of this change is to preserve especially large and healthy trees. This level of protection acknowledges the ecological benefits, public appeal and difficulty in replacing trees of a larger size. Extensive discussion was had among staff and within focus group meetings regarding the “right” size for this level of protection. The answer varies with the species. Small maturing trees, as classified in the Design and Construction Standards (DCS) approved tree list, may qualify at a relatively small diameter, well under ten inches, versus medium or large trees that may not qualify until they reach 24 inches or more. A list of the commonly planted trees and minimum size thresholds needs to be developed as part of this change. A detailed assessment would be required of each tree over the size limit, public and private, that is proposed for removal for development. Health and species are key factors; no tree considered to be a public safety hazard as assessed by a Certified Arborist would qualify for preservation. Site access and severely limited development potential are valid reasons for tree removal; however, maximizing development potential by itself may not qualify a tree for removal.

Pros: Tree removal permits could be administered through the current Administrative Review process, providing an inexpensive and relatively quick two week turn-around. An appeal process for denial could provide additional opportunity for review. Enforcement ability is a key part of this review process. Although this may viewed as a controversial approach, it should be noted that Denver limits tree removal in front yard setbacks; Telluride requires a permit to remove any deciduous tree six inches and over and any coniferous tree three inches and over; Parker allows Stop Work Orders, withholds building permits and withholds Certificates of Occupancy if development removes trees marked for preservation during review. Additional discussion regarding mitigation and size thresholds is needed.

Cons: As an additional step and application in an already complex review process, public perception of such a change could be negative. Although a relatively simple application, extensive staff time in public outreach could result. Enforcement of such a permit could also prove very time consuming in cases where trees are removed prior to application. Selection criteria will be critical in balancing tree preservation with development.

8. Landmarking Trees

To date, historic preservation has been primarily applied to architecture and very generally to the character of the surrounding landscape. For example the Mapleton Historic district generally refers to the existing mature trees, but does not list specific standards for review. The historic landmark program could take advantage of the ability to designate a feature, such as a tree, as historically significant. This application of the Historic Preservation code has not, to date, been

applied in this manner in Boulder. Based on staff discussion, there has been a long standing assumption that if a natural feature was nominated, it had to be associated with a built structure; however, none of the existing code language makes association with a built structure either an explicit or implicit requirement.

The current Historic Preservation code does not include clear criteria for the review of natural features and some training for the Historic Preservation staff and Board is anticipated. Criteria for review would take into account the species and condition of the tree indicating its desirability and potential longevity. As with historic buildings, nomination could be made by a landowner or initiated by the city. This protection option is probably not applicable to the vast majority of Boulder's urban canopy; rather it is appropriate only for a handful of exceptional high quality trees.

Several steps need to occur to create a Landmark Tree program comparable to the current program used for structures. Structures meeting landmark criteria are reviewed as a matter of course with all building permit applications. To

Pros: This is a generally accepted form of protection in Boulder for buildings. The process, although needing criteria to review a tree, is in place with an existing staff and review board. Cost to the applicant, if owner nominated, would be limited to arborist inspections. The Landmark approach also provides flexibility in who may nominate a tree for protection.

Cons: City nomination of landmark trees may be viewed negatively. The preservation of a constantly changing living organism also presents inherent problems. Very clear thresholds for nomination and removal will be necessary.